

**PRINCIPAL ENVIRONMENTAL ISSUES  
FACING THE U.S. COKE INDUSTRY  
IN 1999 AND BEYOND**

**Tuesday, 04 May 1999**

**Meeting of the International Tar Association  
The Broadmoor  
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## **TABLE 1. ACCCI MEMBERSHIP**

- **“Merchant” Producers of Metallurgical Coke**
- **Coke Sales Agents**
- **Steel Manufacturers that Produce Coke**
- **Producers/processors of chemicals derived from distillation of coal and coal tar**
- **Industry Suppliers**

**TABLE 2. ACTIVE DOMESTIC COKE PLANTS**

<b>STATE</b>	<b>COMPANY</b>	<b>CITY</b>
<b>ALABAMA</b>	ABC Coke (Drummond Company, Inc.) <sup>1</sup>	Tarrant
	Empire Coke Company <sup>1</sup>	Holt
	Gulf States Steel, Inc. <sup>2</sup>	Gadsden
	Sloss Industries <sup>1</sup>	Birmingham
<b>ILLINOIS</b>	Acme Steel Co. <sup>2</sup>	Chicago
	Indiana Harbor Coke Company <sup>1, 3</sup>	East Chicago
	LTV Steel Corp. <sup>2</sup>	South Chicago
	National Steel Corp. <sup>2</sup>	Granite City
<b>INDIANA</b>	Bethlehem Steel Corp. <sup>2</sup>	Burns Harbor
	Citizens Gas & Coke Utility <sup>1</sup>	Indianapolis
	USS <sup>2</sup>	Gary
<b>KENTUCKY</b>	AK Steel <sup>2</sup>	Ashland
<b>MICHIGAN</b>	National Steel Corp. <sup>2</sup>	Ecorse
<b>NEW YORK</b>	Bethlehem Steel Corp. <sup>2</sup>	Lackawanna
	Tonawanda Coke Corp. <sup>1</sup>	Tonawanda
<b>OHIO</b>	AK Steel <sup>2</sup>	Middletown
	LTV Steel Corp. <sup>2</sup>	Warren
	New Boston Coke Corp. <sup>1</sup>	New Boston
<b>PENNSYLVANIA</b>	Erie Coke Corp. <sup>1</sup>	Erie
	Koppers Industries, Inc. <sup>1</sup>	Monessen
	Shenango Inc. <sup>1</sup>	Pittsburgh
	USS <sup>2</sup>	Clairton
<b>UTAH</b>	Geneva Steel <sup>2</sup>	Provo
<b>VIRGINIA</b>	Jewell Coke and Coal <sup>1, 3</sup>	Vansant
<b>WEST VIRGINIA</b>	Wheeling-Pittsburgh Steel Corp. <sup>2</sup>	Follansbee

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<sup>1</sup>Plant is an independently owned/operated "merchant" coke plant.

<sup>2</sup>Plant is owned/operated by an integrated steel company.

<sup>3</sup>Plant is a nonrecovery coke plant.

### **TABLE 3. PRESENTATION OVERVIEW**

- **Clean Air Act (CAA)**
- **Clean Water Act (CWA)**
- **Toxic Substances Control Act (TSCA)**

## **TABLE 4.**

### **WHAT IS THE CLEAN AIR ACT (CAA)?**

- **CAA is a federal environmental statute.**
- **Focus is the regulation of air pollution emissions to protect human health and the environment.**
- **U.S. Environmental Protection Agency (EPA) is charged with implementing the CAA, in partnership with the states.**

**TABLE 5.**  
**CLEAN AIR ACT (CAA) BACKGROUND**

- **Air Pollution Control Act became law in 1955, creating the Public Health Service research program to study air pollution.**
- **Air Pollution Control Act amended in 1960, directing the Surgeon General to study motor vehicle pollution.**
- **CAA replaced Air Pollution Control Act in 1963, directing research into fuel desulfurization and development of air quality criteria.**
- **CAA amended in 1965, authorizing the investigation of new pollution sources.**
- **CAA amended in 1967, authorizing the designation of air quality control regions (AQCRs) for those areas with serious air pollution problems.**

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***TABLE 5. (Concluded)***

- **CAA amended in 1970 to establish full-fledged federal regulatory program (EPA created in 1970). Major themes:**
  - **Air quality management programs (NAAQS and SIPs)**
  - **Technology-based standards for new sources (NSPS Program)**
  - **Health-based standards for hazardous air pollutants (NESHAP Program)**
  - **Mobile Source Program**
- **CAA amended in 1977. Major themes:**
  - **Nonattainment Program**
  - **PSD Program**
  - **Changes to NSPS and Mobile Source programs**
- **CAA was last amended in 1990 (11-15-90).**

**TABLE 6. MAJOR THEMES (TITLES) OF  
CLEAN AIR ACT AMENDMENTS OF 1990**

- **ATTAINMENT AND MAINTENANCE OF NATIONAL STANDARDS (TITLE I)**
- **MOBILE SOURCES AND ALTERNATIVE FUELS (TITLE II)**
- **AIR TOXICS (TITLE III)**
- **ACID RAIN (TITLE IV)**
- **OPERATING PERMITS (TITLE V)**
- **STRATOSPHERIC OZONE AND GLOBAL CLIMATE (TITLE VI)**
- **ENFORCEMENT (TITLE VII)**



**TABLE 7.**  
**CAAA TITLE III “COKE OVEN PROVISION”**

- **Requirements for existing coke oven batteries**
  - **“MACT Track” option**
  - **“Extension Track” or “LAER Track” option**
- **Requirements for new coke oven batteries**
- **DOE/EPA Coke Oven Production Technology Study**
- **Public disclosure by Extension Track batteries of EPA residual risk assessments**

**TABLE 8.**  
**COKE OVEN “MACT TRACK” OPTION**

- **“Maximum achievable control technology” (MACT) standard (12-31-95)**
  
- **“Residual risk” standard (12-31-2003)**
  
- **Work practice standards (11-15-93)**
  
- **EPA review of MACT standard every seven years for increased stringency**

**TABLE 9.**  
**COKE OVEN EXTENSION TRACK**  
**(“LAER” TRACK) OPTION**

- **Special MACT standard (11-15-93)**
  
- **“Lowest achievable emission rate” (LAER) standard (01-01-98)**
  
- **Second LAER standard (01-01-2010)**
  
- **“Residual risk” standard (01-01-2020)**
  
- **Work practice standards (11-15-93)**

**TABLE 10.**  
**REQUIREMENTS FOR**  
**NEW COKE OVEN BATTERIES**

- **Coke Oven Provision specified technological basis for MACT standards for new batteries.**
  - **Jewell-design Thompson non-recovery coke oven batteries**
  - **Other non-recovery technologies**
  - **Other appropriate emission control/coke production technologies**
- **Under EPA's implementing regulations, these standards apply to "greenfield" batteries, or additions to capacity at existing coke plants.**

**TABLE 11.**  
**COKE OVEN PRODUCTION**  
**TECHNOLOGY STUDY**

- **Six-year, \$30 million study is to be undertaken and controlled by DOE/EPA.**
  
- **At least 50% of project costs must be borne by non-federal sources.**
  
- **Cooperative agreement was recently completed with Calderon Energy Company.**

**TABLE 12.**  
**PUBLIC DISCLOSURE BY COKE PLANTS**  
**OF EPA'S RESIDUAL RISK ESTIMATES**

- **Operators of Extension Track batteries must publicly disclose in 1999 any risk assessments prepared by EPA to determine the appropriate level of Section 112(f) (residual risk) standards.**
  
- **Disclosure may prompt greater public scrutiny of coke plants, leading to more stringent state/local standards.**

**TABLE 13.**  
**RESIDUAL RISK**  
**STANDARD SETTING UNDER CAAA TITLE III**

- **CAAA mandated three studies to help Congress decide whether to change the decision making criteria for residual risk standards:**
  - **EPA/Surgeon General Risk Study**
  - **National Academy of Sciences (NAS) Study of Risk Assessment Methodology**
  - **Risk Assessment and Management Commission**
- **Unless Congress changes the law, standards are to be set so as to provide an “ample margin of safety”.**

**TABLE 14.**  
**EPA'S RESIDUAL RISK ESTIMATES**  
**FOR COKE PLANTS**

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- EPA provided estimates to Congress in 1990 during debate on amending of the Clean Air Act.
  
- 23 of 30 coke plants were above EPA's "presumptively acceptable" risk threshold ( $1 \times 10^{-4}$ ).



**TABLE 15. COKE OVEN NESHAP  
REGULATORY NEGOTIATION**

- **EPA was on a tight schedule for promulgating coke oven NESHAPs.**
  - **1995 Existing Source MACT Standard by 12-31-92**
  - **1998 LAER Standard by 12-31-92**
  - **Work Practice Standard by 12-31-92**
  - **New Source MACT Standard by 12-31-92**
  - **Visible Emission Observation method (EPA Reference Method 303) by 12-31-92**
- **“Reg Neg” begun in 01-92 with all interested parties.**
  - **EPA**
  - **Labor unions**
  - **State/local air pollution control officials**
  - **Environmental groups**
  - **Industry (AISI and ACCCI)**
- **EPA promulgated “non consensus” NESHAPs on 10-27-93.**

**TABLE 16.**  
**MAJOR ISSUES DISCUSSED**  
**DURING COKE OVEN “REG NEG”**

- **Emissions data to be used in selecting the standards**
- **Potential regulatory formats/numerical emission limits**
- **Tall battery/merchant industry subcategorization**
- **Visible emission monitoring methods**
- **Costs/economics**
- **Work practices**
- **Enforcement and implementation issues**
- **Future research**

**TABLE 17.**  
**COKE OVEN NESHAPS**

	MACT		LAER		
	12-31-95	Beyond 2003 (must meet residual risk)	11-15-93	1-1-98	1-1-07
DOORS (PLD <sup>1</sup> )		lower of			
• TALL <sup>2</sup>	6.0	5.5	7.0	4.3	4.0
• SHORT <sup>3</sup> /INTEGRATED <sup>4</sup>	5.5	5.0	7.0	3.8	3.3
• FOUNDRY <sup>5</sup>	5.5	5.0 or residual risk	7.0	4.3 or lower based on 2007 result	4.0
LIDS (PLL <sup>6</sup> )	0.6	lower of 0.6 or residual risk	0.83	0.4 or lower based on 2007 result	0.4
OFFTAKES (PLO <sup>7</sup> )	3.0	lower of 3.0 or residual risk	4.2	2.5 or lower based on 2007 result	2.5
CHARGING (log) s/charge <sup>8</sup>	12	lower of 12 or residual risk	12	12 or lower based on 2007 result	12

<sup>1</sup> "Percent leaking doors" as determined using EPA Reference Method 303. All standards are rolling averages of the last 30 daily readings - one reading per day.

<sup>2</sup> A "tall" battery is a battery with ovens 6 meters or more in height.

<sup>3</sup> A "short" battery is a battery with ovens less than 6 meters in height.

<sup>4</sup> An integrated steel producer is a company or corporation that produces coke, uses the coke in a blast furnace to make iron, and uses the iron to produce steel.

<sup>5</sup> A foundry coke producer is a coke producer that is not and was not on 01-01-92, owned or operated by an integrated steel producer and had on 01-01-92, an annual design capacity of less than 1.25 million megagrams per year.

<sup>6</sup> "Percent leaking lids" as determined using EPA Reference Method 303. All standards are rolling averages of the last 30 daily readings - one reading per day.

<sup>7</sup> "Percent leaking offtakes" as determined using EPA Reference Method 303. All standards are rolling averages of the last 30 daily readings - one reading per day.

<sup>8</sup> Charging as determined using EPA Reference Method 303. Standards are calculated as a 30 day average of the log average of five charging observations per day.

**TABLE 18. IMPLICATIONS OF COKE OVEN NESHAPS  
FOR EXISTING COKE OVENS**

- **Most coke plants (18 plants with 55 batteries) have elected the Extension Track for all their batteries.**
- **Five coke plants with seven batteries have elected the MACT Track for all their batteries.**
- **One plant with two batteries has elected to place one battery on the Extension Track and one battery on the MACT Track.**
- **Projected industry compliance costs are:**
  - **\$66 million to \$510 million in capital costs**
  - **\$25 million to \$84 million in total annualized costs**

**TABLE 19.**  
**COKE OVEN NESHAP TRACK SELECTION TABLE**

<b><u>COMPANY</u></b>	<b><u>BATTERY</u></b>	<b><u>HEIGHT (m)</u></b>	<b><u>TRACK</u></b>
ABC Coke	1	5.0	E
	5	4.0	E
	6	4.0	E
Acme Steel	1	4.0	E
	2	4.0	E
AK Steel Middletown	3	4.0	M
AK Steel Ashland	3	4.0	M
	4	5.0	E
Bethlehem Burns Harbor	1	6.0	E
	2	6.0	E
Bethlehem Lackawanna	7	3.5	E
	8	3.5	E
Citizens Gas	E	3.5	E
	H	3.5	E
	1	5.0	E
Empire Coke	1	2.5	E
	2	2.5	E
Erie Coke	A	3.5	M
	B	3.5	M
Geneva Steel	1	4.0	E
	2	4.0	E
	3	4.0	E
	4	4.0	E
Gulf States Steel	2	4.0	M
	3	4.0	M
Indiana Harbor	A	N.A. <sup>1</sup>	M
	B	N.A. <sup>1</sup>	M
	C	N.A. <sup>1</sup>	M
	D	N.A. <sup>1</sup>	M

***(continued)***

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<sup>1</sup>Not applicable - nonrecovery battery

**TABLE 19. (Concluded)**

<b><u>COMPANY</u></b>	<b><u>BATTERY</u></b>	<b><u>HEIGHT (m)</u></b>	<b><u>TRACK</u></b>
Jewell Coke	2D	N.A. <sup>1</sup>	E
	2E	N.A. <sup>1</sup>	E
	3F	N.A. <sup>1</sup>	E
	3G	N.A. <sup>1</sup>	E
	3B	N.A. <sup>1</sup>	E
	3C	N.A. <sup>1</sup>	E
Koppers Monessen	1B	4.0	E
	2	4.0	E
LTV Steel Chicago	2	6.0	E
LTV Steel Warren	4	4.0	E
National Steel Great Lakes	5	6.0	E
National Steel Granite City	A	4.0	E
	B	4.0	E
New Boston Coke	2	4.0	M
Shenango	1	4.0	E
Sloss Industries	3	4.0	E
	4	4.0	E
	5	4.0	E
Tonawanda Coke	2	4.0	M
USS Clairton	1	3.6	E
	2	3.6	E
	3	3.6	E
	7	3.6	E
	8	3.6	E
	9	3.6	E
	13	3.6	E
	14	3.6	E
	15	3.6	E
	19	4.3	E
	20	4.3	E
	B	6.1	E
USS Gary	2	6.2	E
	3	6.2	E
	5	3.1	E
	7	3.1	E
Wheeling Pittsburgh	1	3.0	E
	2	3.0	E
	3	3.0	E
	8	6.0	E

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<sup>1</sup>Not applicable – nonrecovery battery

**Table 20.**  
**Summary of Battery Data**

BATTERY TYPE	PERCENT LEAKING DOORS		PERCENT LEAKING OFFTAKES		PERCENT LEAKING LIDS		SECONDS PER CHARGE	
	Average	90 Percentile	Average	90 Percentile	Average	90 Percentile	Log Average	90 Percentile
51 batteries, both average and 90 percentile reported.	1.45	2.09	0.65	1.11	0.07	0.15	3.92	4.82
43 batteries, 4 meters or less	1.39	2.01	0.65	1.11	0.07	0.15	3.76	4.62
8 batteries, taller than 4 meters	1.81	2.56	0.67	1.08	0.09	0.17	4.78	5.87
18 batteries with jumper pipe hole	1.30	1.93	0.52	1.14	0.10	0.17	3.59	4.28
27 batteries with double main	1.49	2.19	0.76	1.12	0.05	0.13	4.42	5.49
6 batteries with other systems	1.73	2.18	0.57	0.96	0.08	0.18	2.72	3.40

**TABLE 21.**  
**OTHER COKE INDUSTRY SOURCES**  
**SUBJECT TO NESHAP REGULATION**

<b><u>SOURCE</u></b>	<b>NESHAP PROMULGATION DEADLINE</b>
Pushing Operations	15 November 2000
Quenching Operations	15 November 2000
Combustion Stacks	15 November 2000

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**TABLE 22. REQUIREMENTS/IMPLICATIONS  
OF CAAA “ATTAINMENT AND MAINTENANCE  
OF NATIONAL STANDARDS” TITLE**

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- Title focuses on ozone nonattainment, although nonattainment for CO, particulate matter, and sulfur dioxide is also addressed.
- Title establishes variable deadlines to achieve the ozone standard on the basis of severity of present pollutant levels.
  - RACT requirements tightened/broadened (Major source threshold varies by severity of nonattainment)
  - Revised SIPs - Progress Requirements (net VOC emission reduction of 15% by 15 November 1996 and 3%/year thereafter)
  - Tighter netting/offset requirements for new sources
- Coke plants located in one of the 80 to 100 "nonattainment" areas may experience either or both of the following:
  - In extreme cases, higher offset ratios than would otherwise apply;
  - Requirements for retrofitting emission control equipment.

**TABLE 23.**  
**REQUIREMENTS/IMPLICATIONS**  
**OF CAAA “ACID RAIN” TITLE**

- New requirements on coal-fired power plants:
  - Mandated reductions in sulfur dioxide and nitrogen oxide emissions
- Coke oven plants may experience higher electric bills.
- Industrial sources may voluntarily participate.

**TABLE 24. REQUIREMENTS/IMPLICATIONS  
OF CAAA “OPERATING PERMITS” TITLE**

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- Title requires states to establish comprehensive new operating permit programs for all significant air emission sources, including:
  - Major sources (>100 tons/year in most areas; smaller threshold in polluted areas);
  - All sources subject to air toxics regulation, including all coke oven batteries; and,
  - NSPS sources.
- Principal Impacts on Industrial Sources
  - Applications (must be submitted within 12 months after state permit program takes effect, or ~ end of 1995)
  - Permits (issued for maximum of 5 years - permit issuance expected to proceed slowly)
  - Detailed requirements (e.g., emission limitations, standards compliance schedules, monitoring/reporting)
  - Annual fees  $\geq$  \$25/ton of all regulated pollutants (except CO)
  - Operational flexibility possibly limited

**TABLE 25. REQUIREMENTS/IMPLICATIONS  
OF CAAA “ENFORCEMENT” TITLE**

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- Title adds tough new enforcement authorities, including civil and criminal sanctions.
  
- Principal Impacts on Industrial Sources
  - Premium on compliance
  
  - Paperwork (i.e., recordkeeping)
  
  - New criminal exposures
    - Violations in general
    - Recordkeeping crimes
    - Negligent/knowing endangerment
    - Presumption of continuing violation
  
  - Civil enforcement
    - Administrative penalties (\$25,000/day)
    - Field citations (\$5,000/day/violation)
    - Administrative orders
    - Citizens Suits
    - Bounty Hunter provision (\$10,000)

**TABLE 26.**

**WHAT IS THE CLEAN WATER ACT (CWA)?**

- **CWA is a federal environmental statute.**
- **Focus is the restoration and maintenance of the chemical, physical and biological integrity of the nation's waters.**
- **U.S. Environmental Protection Agency (EPA) is charged with implementing the CWA.**
- **Key features include:**
  - **Technology- and Water Quality-based effluent limits**
  - **National Pollution Discharge Elimination System (NPDES) (permit program for industrial/municipal point-source discharges)**
  - **Water quality management program (water quality standards, implemented via NPDES permit levels)**
  - **Specific provisions for pollutant discharges of particular concern/special character**
  - **Publicly-Owned Treatment Works (POTW) grant program**

**TABLE 27.**  
**CLEAN WATER ACT (CWA) BACKGROUND**

- **CWA dates back to 1948, when Congress first provided municipalities with money to construct wastewater treatment facilities.**
  - **Primary objective was protecting the responsibilities/rights of the states.**
  - **Law did not address water pollution control.**
- **CWA amended several times between 1948 and 1972.**
- **Congress enacted Federal Water Pollution Control Act of 1972 (over President Nixon's veto).**
  - **Greatly expanded federal control over wastewater discharges**
  - **Established technology-based approach to control of water pollution from "point sources", augmented by a water quality management program (water quality standards implemented via NPDES permit levels)**
  - **Focused on municipal/industrial "point sources" of wastewater**
  - **Expanded scope of federal regulation to include all "waters of the United States"**

*(continued)*

**TABLE 27. (Concluded)**

- **CWA amended in 1977, 1978, 1981 and 1987. 1987 Amendments strengthened CWA:**
  - **Began phase-out of federal funds to states/districts for constructing sewage treatment facilities**
  - **Established new state-federal program to control “non-point source” pollution from diffuse sources**
  - **Established new water-quality-based approach to control of toxic water pollution**
  - **Focused on improving water quality in estuaries/lakes**
  - **Established new permit program for storm water discharges from industrial facilities/cities**
  - **Specified deadlines for promulgation of remaining industrial effluent limitations**

**TABLE 28.**  
**MAJOR CWA PROVISIONS**

- **Research and Related Programs (Title I)**
- **Grants for Construction of Treatment Works (Title II)**
- **Standards and Enforcement (Title III)**
- **Permits and Licenses (Title IV)**
- **General Provisions (Title V)**
- **State Water Pollution Control Revolving Funds (Title VI)**



## **TABLE 29. EPA'S REASSESSMENT OF ELGS FOR THE IRON/STEEL INDUSTRY CATEGORY**

- **ELGs are industry-specific, technology-based standards that limit the amount of industrial waste water pollutants being discharged into the nation's waters.**
- **EPA is now reassessing ELGs for the iron/steel industry category, which includes both integrated and "stand-alone" coke plants.**
  - **EPA first issued iron/steel ELGs in 05-82.**
  - **September 1995 EPA report concluded that the iron/steel industry has changed significantly since 1982.**
  - **EPA began reassessment of industry in 1998.**
  - **EPA plans to issue proposed rule in 10-2000 and final rule in 04-2002.**
  - **AISI and ACCCI have joined forces to address rulemaking relative to cokemaking.**

**TABLE 30.  
SCOPE OF WORK  
IN EPA'S REASSESSMENT OF IRON/STEEL ELGS**

- **Collecting relevant data**
  - **Reviewing manufacturing processes**
  - **Creating an industry profile**
  - **Characterizing the industry**
  - **Characterizing wastewater**
  - **Identifying available and demonstrated pollution prevention and wastewater treatment technologies**
  - **Developing and mailing industry surveys performing site visits**
  - **Conducting wastewater and solid waste sampling and analysis**
- **Performing approximately 70 site visits at iron and steel sites, including stand-alone coke plants**
- **Conducting approximately 20 sampling/analysis programs**
- **Evaluating information obtained**

**TABLE 31.**  
**WHAT IS THE**  
**TOXIC SUBSTANCES CONTROL ACT (TSCA)?**

- **TSCA is a federal environmental statute.**
- **TSCA authorizes EPA to require private parties to develop scientific data to assess the effects of chemical substances/mixtures on human health and the environment.**
- **Key features include:**
  - **TSCA Inventory**
  - **Testing of Chemical Substances and Mixtures**
  - **Premanufacture Notification Program for “New Chemicals”**
  - **Regulation of Existing Chemicals to Prevent “Unreasonable Risk”**
  - **Information Gathering Authority**

**TABLE 32.**  
**BACKGROUND ON THE**  
**TOXIC SUBSTANCES CONTROL ACT (TSCA)**

- **Prior to TSCA, there were no federal controls over most new chemicals.**
  
- **TSCA was enacted in 1976 to address increasing exposures of people/environment “to a large number of chemical substances and mixtures”.**

**TABLE 33.**  
**EPA'S CHEMICAL RIGHT-TO-KNOW INITIATIVE**

- Initiative was kicked off by Vice President Gore on Earth Day 1998.
- Initiative responds to an EPA study that found that very little basic toxicity information is publicly available on most of approximately 2800 “high production volume” (HPV) commercial chemicals made and used in the United States.
- Initiative has three major components:
  - “HPV Challenge Program” under which chemical manufacturers and importers are being asked to voluntarily provide the basic toxicity data on the HPV chemicals they produce.
  - “PBT Program” involving additional reporting of information on those chemicals that are persistent, bioaccumulative, and toxic (PBT).
  - Children’s Health Test Rule involving more detailed and extensive testing of HPV chemicals of particular concern to children's health.

**TABLE 34.**  
**EPA'S "HPV CHALLENGE PROGRAM"**

- **Program was kicked off by Vice President Gore and EPA Administrator Browner on 10-09-98.**
- **Program calls upon chemical manufacturers/importers to complete a set of baseline data on health/environmental effects on most of the approximately 2800 HPV chemicals.**
  - **Initially, EPA is seeking assessment/testing of chemicals on a voluntary basis.**
  - **Chemicals not "volunteered" by 12-01-99 will be subject to new test rule issued by EPA under TSCA.**
  - **EPA plans to issue final rule by 02-2000.**
  - **Data generated will be made available to the public via the internet.**
  - **Program is to be completed by 2004.**
- **About 25 coal-derived substances are on the HPV list.**
  - **Coke producers are addressing this issue via the AISI/ACCCI Coke Oven Environmental Task Force (COETF).**
  - **Tar refiners are addressing the issue via the ACCCI.**

**TABLE 35.**  
**COAL DERIVATIVES ON EPA'S HPV LIST**

<b><u>CAS No.</u></b>	<b><u>Chemical Name</u></b>
65996-80-7	Ammonia liquor, (coal)
90640-80-5	Anthracene oil
68187-59-7	Coal, anthracite, calcined
8001-58-9	Creosote
70321-79-8	Creosote oil, high-boiling distillate
70321-80-1	Creosote oil, low-boiling distillate
65996-92-1	Distillates, (coal tar)
90640-86-1	Distillates, (coal tar), heavy oils
65996-91-0	Distillates, (coal tar), upper
65996-86-3	Extract oils, (coal), tar base
65996-87-4	Extract residues, (coal), tar oil alk.
73665-18-6	Extract residues, (coal), tar oil alk. naphthalene distn. residues
65996-83-0	Extracts, coal tar oil alk.
65996-81-8	Fuel gases, coke-oven
65996-78-3	Light oil, (coal), coke-oven
91-20-3	Naphthalene
1321-94-4	Naphthalene, methyl-
65996-93-2	Pitch, coal tar, high-temp.
68187-57-5	Pitch, coal tar-petroleum
85-44-9	Phthalic anhydride
65996-79-4	Solvent naphtha, (coal)
68952-33-0	Tar acids, cresylic, C8-rich, phosphates
68952-35-2	Tar acids, cresylic, Ph phosphates
65996-82-9	Tar oils, coal
8007-45-2	Tar, coal
68918-16-1	Tar, coal, dried and oxidized
65996-89-6	Tar, coal, high temp.
68990-61-4	Tar, coal, high-temp., high-solids

## **TABLE 36. CONCLUSIONS**

- **Three statutes of principal concern:**
  - **Clean Air Act Amendments of 1990 (CAAA)**
  - **Clean Water Act (CWA)**
  - **Toxic Substances Control Act (TSCA)**
- **CAAA pose most serious implications for coke industry, with Air Toxics Title being of most concern.**
- **ACCCI is addressing issues via groups like the AISI/ACCCI Coke Oven Environmental Task Force, to ensure that the industry continues to thrive well into the 21st century.**